

Amendments to the Specification:

Please replace paragraph [0014] with the following rewritten paragraph:

[0014]

Up to now, in order to supplement the peeling force, the abutment against peeling claw or the peeling sheet has been performed in the above region, or the like, or the self-stripping method has been applied. However, the above cannot be sufficiently satisfied because the rotating member or the recording medium is damaged, the image quality is adversely affected, or the peeling property is not sufficient. Under the circumstances, in the peeling device according to the present invention, a technique that uses the compressed air for sheet peeling is applied to suppress an adverse influence on the image quality. That is, because when the peeling guide plate is apart from the surface of the rotating member, there is no fear that the rotating member is damaged, and because the recording member is not mechanically and forcedly peeled off from the rotating member, the recording medium is not also damaged. Similarly, at this time, because the image is in surface contact with the peeling guide plate even after peeling without damaging the image, the image quality is not deteriorated.

Please replace paragraph [0024] with the following rewritten paragraph:

[0024]

With the above-mentioned structure, a portion of the leading end of the recording medium in the conveying direction, which is hit by the compressed air from the nozzle is peeled off into a floating state, and a portion of the one side of the peeling guide plate corresponding to the portion, which is close to the surface of the rotating member becomes a convex portion. Accordingly, the leading end of the recording medium which excellently floated by the compressed air is guided to the convex portion of the peeling guide plate, and the entire surface of the recording medium is successively peeled off. In this way, with the

appropriate combination of the above peeling device according to the present invention with the peeling device according to the present invention, there can be provided the peeling device superior in terms of practical use without damaging the image, the recording medium and the rotating member including the fixing roll, ~~with~~while ensuring the extremely high peeling property and without adversely affecting the image quality.

Please replace paragraph [0027] with the following rewritten paragraph:

[0027]

In the fixing device according to the present invention, the heat rotating member may be formed in a roll shape or an endless belt shape. Similarly, the pressure rotating member may be formed in a roll shape or an endless belt shape. That is, the fixing device according to the present invention can be applied to any type of ~~the~~-fixing device such as the fixing device of the two-roll system, the fixing device of the roll-belt nip method, and the fixing device of the belt-belt nip method. It is needless to say that, in case of the roll-belt nip method, any one of the heat rotating member and the pressure rotating member may be formed in a roll or a belt. The above-mentioned belt may be stretched by plural rolls or free without being extended (free belt ~~nip~~nip method).

Please replace paragraph [0034] with the following rewritten paragraph:

[0034]

Fig. 5 is an explanatory diagram for explaining an action of the peeling device in ~~the~~ step order in accordance with a first aspect of the present invention, which shows steps 1 and 2;

Please replace paragraph [0035] with the following rewritten paragraph:

[0035]

Fig. 6 is an explanatory diagram for explaining the action of the peeling device in ~~the~~ step order in accordance with the first aspect of the present invention, which shows steps 3 and 4;

Please replace paragraph [0047] with the following rewritten paragraph:

[0047]

The fixing device shown in Fig. 1 includes a fixing roll (heating rotating member) 1 which rotates in a direction shown by an arrow A and a pressure roll (pressure rotating member) 6 which is driven to rotate in a direction shown by an arrow B opposite to the rotation direction A of the fixing roll 1 while the pressure roll 6 is in contact with the fixing roll 1. A sheet (recording medium) P carrying a toner image T made from unfixed toner on its surface is conveyed in a direction shown by an arrow C and inserted into a nip portion N formed between the fixing roll 1 and the pressure roll 6 to be heated and pressurized by ~~a the~~ pair of ~~the~~ rolls 1 and 6 so that the toner of the toner image T is fused, thereby fixing the toner image T to the surface of the sheet P.

Please replace paragraph [0048] with the following rewritten paragraph:

[0048]

On a downstream side in the rotation direction A of the fixing roll 1 from the nip portion N of the fixing roll 1, a peeling guide plate 7 is disposed such that one of its sides is in close proximity to the surface of the fixing roll 1 and it is laid in the rotation direction A of the fixing roll 1. When the sheet P carrying the toner image T with molten toner is conveyed in the direction shown by the arrow C while it is inserted into the nip portion N, the sheet P is peeled off from the fixing roll 1 by the peeling guide plate 7. In an area between the surface of the fixing roll 1 and the surface opposed to that surface of the peeling guide plate 7, ~~a gas~~ jetting ~~device~~devices (gas jetting ~~unit~~units) 10 ~~is~~are arranged.

Please replace paragraph [0052] with the following rewritten paragraph:

[0052]

Fig. 2 is an enlarged plan view of the peeling device in this embodiment, that is, the peeling guide plate 7 and the gas jetting devices 10 when seen from the surface side of the fixing roll 1. As shown in Fig. 2, in this embodiment, three gas jetting devices 10 are arranged in the longitudinal direction of the peeling guide plate 7. In the present invention, the number of the gas jetting devices is not limited. At least one gas jetting device may be provided and preferably plural gas jetting devices are provided. In this embodiment, the gas jetting devices 10 include air nozzles 10a-1, 10a-2, and 10a-3 having an inner diameter of 0.5 to 4 mm, electromagnetic valves 10b-1, 10b-2, and 10b-3 and gas feeders not shown in Fig. 2, respectively, so that a compressed gas stream (compressed gas) is delivered in the form of pulses from the air nozzles ~~10a-a~~10a-1, 10a-2, and 10a-3. The expression "form of pulses" means an air stream which is caused to flow not continuously but only one time for a short period of time (for example, 0.01 to 0.1 sec) or intermittently at a certain time interval.

Please replace paragraph [0060] with the following rewritten paragraph:

[0060]

The sheet (recording medium) P conveyed in the direction shown by the arrow C and inserted into the nip portion N between the fixing roll (heating rotating member) 1 and the pressure roll (pressure rotating member) 6 comes out in a direction shown by the arrow D from the outlet of the nip portion N while it is closely adhered (stuck) to the surface of the fixing roll 1 functioning as a rotating member. After passing through the outlet of the nip portion N, the sheet P(recording medium)-P advances together with the surface of the fixing roll 1 while drawing a curve in the rotation direction (direction shown by the arrow A) and the leading end in the conveying direction C of the sheet P (may be simply referred to as "sheet end" hereinafter) near the air nozzles is peeled off from the surface of the fixing roll 1

by the compressed gas in the form of pulses delivered from the air nozzles of the gas jetting devices 10 and conveyed while the sheet end is floating (see step 1 in Fig. 5).

Please replace paragraph [0062] with the following rewritten paragraph:

[0062]

Thereafter, the subsequent portion after the leading end in the conveying direction C of the sheet P gradually runs onto the end of the peeling guide plate 7 and is moved in slide contact with the surface of the peeling guide plate 7 in accordance with the rotation of the fixing roll 1, whereby it is gradually peeled off from the surface of the above rotating member until the sheet P is entirely removed (see steps 3 and 4 in Fig. 6). Then, the sheet P is guided by ~~ana~~ delivery guide 11 to be delivered to the outside of the apparatus by ~~ana~~ delivery roll 12.

Please replace paragraph [0076] with the following rewritten paragraph:

[0076]

In Fig. 8, the sheet P conveyed while it is stuck to the surface of the fixing roll 1 is peeled off from the surface of the fixing roll 1 by the compressed gas from the not-shown gas jetting devices 10 at ~~thea~~ peeling point S.

The leading end of the sheet P peeled off at the peeling point S runs over ~~thean~~ end G of the peeling guide plate 7. Fig. 8 shows this state. The leading end and a portion therearound of the sheet P are conveyed, following substantially the same track as ~~thea~~ tangent E at the peeling point S on the surface of the fixing roll 1. The closer the tangent E and the conveyance track of the sheet P, the more it is possible to make most of the rigidity of the sheet P itself can be made to peel off the sheet P, thereby making it possible to reduce the pressure and pulse width of the compressed gas and to peel off the sheet P smoothly.

Please replace paragraph [0078] with the following rewritten paragraph:

[0078]

The angle θ between a straight line connecting between the peeling point S and the end G of the peeling guide plate 7 (shown as a straight line E as it is the same as the tangent E in Fig. 8) and the front face 8a of the peeling guide plate 7 is preferably -35° to $+20^\circ$, more preferably as close to 0° as possible. When this angle is a large negative value (the front face 8a of the peeling guide plate 7 is farther from the surface of the fixing roll 1 than from the straight line E), the direction of the sheet P is greatly changed by the peeling guide plate 7, thereby making it difficult for the sheet P to slide over ~~the end~~ a face 8c and the and front face 8a of the peeling guide plate 7 smoothly, which produces stress in the guide of the sheet to interfere with the peeling of the sheet. When the angle is a large positive value, it is difficult to arrange the gas jetting devices 10 at suitable positions.

Therefore, the best mode of the present invention is that the tangent E and the front face 8a of the peeling guide plate 7 are aligned with each other so that the sheet P is conveyed while following substantially the same track as the tangent E.

Please replace paragraph [0093] with the following rewritten paragraph:

[0093]

The utility of the ~~first~~first invention will be proved by verifying the specific structures of the fixing device and the peeling device of this embodiment. As for the numbers of air nozzles and the like which are specified in this embodiment, some of them may be studied as variable.

Please replace paragraph [0098] with the following rewritten paragraph:

[0098] $A \leq (L + \alpha) \times S/v$ (2)

In the above expression (2), the left side shows the maximum amount of air which can be supplied from the air pump 10d to the accumulator ~~10d~~10c while the compressed air is not delivered between the first sheet to the next sheet.

Please replace paragraph [0105] with the following rewritten paragraph:

[0105]

The fixing device of this embodiment is essentially composed of a fixing roll 1, a pressure rotating member 16, and peeling devices 7 and 10.

The pressure rotating member 16 is essentially composed of an endless belt 21 stretched by three rolls consisting of a lead roll 18, a pressure roll 19, and a stretch roll 20, and a pressure pad (pressure member) ~~18~~17 pressed against the fixing roll 1 by the endless belt 21.

Please replace paragraph [0109] with the following rewritten paragraph:

[0109]

The pressure pad 17 includes, for example, an elastic member for ensuring the wide nip portion N' and a low-abrasion layer on the side in contact with the inner surface of the endless belt 21 of the elastic member, and is held by a metal holder or the like. The elastic member having the low-abrasion layer on the surface is curved almost in accordance with the peripheral surface of the fixing roll 1 and pressed against the fixing roll 1 to form the nip portion N', and the pressure roll 19 at a downstream of the nip in the conveying direction of the elastic member is strongly pressed against the fixing roll 1 by the endless belt 21 to produce a predetermined amount of distortion at that location of the fixing roll 1.

Please replace paragraph [0121] with the following rewritten paragraph:

[0121]

In this embodiment, as in Embodiments 1 and 2, because the peeling guide plate 22 is apart from the surface of the fixing roll 1 and does not cause the sheet P to be mechanically

and forcedly peeled off therefrom, peeling is achieved without damaging the fixing roll 1, the sheet P and the toner image T formed on the surface of the sheet P. In addition, because the image is in contact with the peeling guide plate 22 on the ~~surface~~front face 23a after peeling, the image quality is not deteriorated.

Please replace paragraph [0123] with the following rewritten paragraph:

[0123]

In this embodiment, the deformed leading end shape of the peeling guide plate 22 is made up of the convex portions 22a that are narrow in the widthwise direction of the leading end and the concave portions 22b that retreat in an arcuate shape, which are disposed between the respective convex portions 22a and both ends of the peeling guide plate 22. Different from Embodiments 1 and 2, the linear portion of the convex portions 22a is narrow in the width, which is because when the total length of the convex portions from the peeling guide plate 22 is set to be shorter, the probability that the peeling guide plate 22 allows the portions of the leading end of the sheet P which are not peeled off from the surface of the fixing roll 1 becomes high, to thereby improve the peeling property.

Please replace paragraph [0130] with the following rewritten paragraph:

[0130]

Also, the deformed leading end shape described in Embodiment 1 above may be applied to this embodiment. As for the deformed leading end shape, the peeling property can be remarkably improved by projecting an appropriate ~~portion~~portion in accordance with the environments where the peeling device is located, the application state, and a state in which the recording medium and the rotating member adhere to each other.

Please replace paragraph [0133] with the following rewritten paragraph:

[0133]

Fig. 13 is an enlarged cross-sectional view for explaining a close contact state of the belt-like rotating member to be peeled off with the sheet. The figure is used for considering the position at which the peeling guide plate is mounted. In Fig. 13, reference numeral 25 denotes a belt-like rotating member which is put around ~~the~~ roll 26 and other rolls which are not shown, and which rotates in a direction indicated by an arrow Q.

Please replace paragraph [0146] with the following rewritten paragraph:

[0146]

On the other hand, the sheet P that has been fed through a sheet feed guide 36 is given an electrostatic force by ~~the~~ charging device 37 and stuck onto the transfer drum 35 in close contact. In this state, when the transfer drum 35 rotates in a direction indicated by an arrow K, the sheet P is conveyed to a position that faces the photosensitive member 31. The toner image of yellow which has been formed on the surface of the photosensitive member 31 in advance is transferred onto the surface of the sheet P by ~~the~~ transfer device 40.

Please replace paragraph [0147] with the following rewritten paragraph:

[0147]

The transfer drum 35 with which the sheet P that carries the toner image of yellow on the surface thereof is in close contact rotates in the direction indicated by the arrow K to convey the sheet P to the position that faces the photosensitive member 31 again after rotating around the photosensitive member 31 once. During the conveyance, all of ~~the~~ peeling and discharging device 38, the peeling devices 7 and 10, ~~the~~ discharging device 42, and the charging device 37 do not operate, and the sheet P is conveyed while being in close contact with the transfer drum 35.

Please replace paragraph [0151] with the following rewritten paragraph:

[0151]

Then, the peeled sheet P is conveyed to the fixing device 39 through the conveying guide 41, and the unfixed toner image is fixed by heat and pressure to form the recorded image. On the other hand, the transfer drum 35 from which the sheet P has been peeled rotates in the direction indicated by the arrow K, and is discharged by the ~~charging~~discharging or charge eliminating device 42, and the transfer drum 35 is made to standby for carrying a subsequent sheet.

Please replace paragraph [0159] with the following rewritten paragraph:

[0159]

(Parameters of the air jetting device 10)

Air pump 10d: A commercially available pump 8 liters/min in air supply performance

~~Air~~Accumulator or air holder 10c: An accumulator 200 cc in tank capacity

The number of air nozzles: Three

The diameter of an orifice of an electromagnetic valve: 1.5 mm

Compressed air: Air is used, the pressure and jet time being set to 0.3 Mpa and 0.025 sec, respectively.

Jet timing of the compressed air: The jet test of the compressed air is conducted in advance to set an appropriate state.

Please replace the Abstract with the attached substitute Abstract.